I. AMENDMENTS

AMENDMENTS TO THE CLAIMS

Cancel claim 39 without prejudice to renewal.

Please enter the amendments to claims 34-38, 40, and 41, as shown below.

Please enter new claims 42-86, as shown below.

1.-33. (Canceled)

34. (Currently amended) ~~An isolated~~ A composition comprising a substantially pure, enzymatically active human plasma hyaluronidase polypeptide, wherein said polypeptide is glycosylated.

35. (Currently amended) The composition ~~polypeptide~~ of claim 34, wherein said ~~glycosylation~~ glycosylated polypeptide is sensitive to N-glycosidase-F treatment.

36. (Currently amended) The composition ~~polypeptide~~ of claim 34, wherein said ~~glycosylation~~ glycosylated polypeptide comprises a mannose residue.

37. (Currently amended) The composition ~~polypeptide~~ of claim 34, wherein said polypeptide further comprises a fatty acid modification.

38. (Currently amended) The composition ~~polypeptide~~ of claim 37, wherein said fatty acid modification is resistant to phospholipase-C, phospholipase-D, and N-glycosidase-F.

39. (Canceled)

40. (Currently amended) The composition ~~polypeptide~~ of claim 34 [[39]], wherein said polypeptide exhibits a specific activity of at least about 6×10^5 relative turbidity reducing units per mg protein.

41. (Currently amended) The composition ~~polypeptide~~ of claim 34, wherein said polypeptide has a relative molecular mass of about 57 kDa as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis.

42. (New) The composition of claim 34, wherein said polypeptide exhibits a specific activity of at least about 2×10^5 relative turbidity reducing units per mg protein.

43. (New) The composition of claim 34, wherein the polypeptide is at least 60% pure.

44. (New) The composition of claim 34, wherein the polypeptide is at least 75% pure.

45. (New) The composition of claim 34, wherein the polypeptide is at least 90% pure.

46. (New) The composition of claim 34, wherein the polypeptide is at least 99% pure.

47. (New) A composition comprising a recombinant, substantially pure, enzymatically active human plasma hyaluronidase polypeptide, wherein said polypeptide is glycosylated.

48. (New) The composition of claim 47, wherein said glycosylated polypeptide is sensitive to N-glycosidase-F treatment.

49. (New) The composition of claim 47, wherein said glycosylated polypeptide comprises a mannose residue.

50. (New) The composition of claim 47, wherein said polypeptide further comprises a fatty acid modification.

51. (New) The composition of claim 50, wherein said fatty acid modification is resistant to phospholipase-C, phospholipase-D, and N-glycosidase-F.

52. (New) The composition of claim 47, wherein said polypeptide exhibits a specific activity of at least about 2×10^5 relative turbidity reducing units per mg protein.

53. (New) The composition of claim 47, wherein said polypeptide exhibits a specific activity of at least about 6×10^5 relative turbidity reducing units per mg protein.

54. (New) The composition of claim 47, wherein said polypeptide has a relative molecular mass of about 57 kDa as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis.

55. (New) The composition of claim 47, wherein the polypeptide is at least 60% pure.

56. (New) The composition of claim 47, wherein the polypeptide is at least 75% pure.

57. (New) The composition of claim 47, wherein the polypeptide is at least 90% pure.

58. (New) The composition of claim 47, wherein the polypeptide is at least 99% pure.

59. (New) A formulation comprising

a) a therapeutically effective amount of a substantially pure, enzymatically active human plasma hyaluronidase polypeptide, wherein said polypeptide is glycosylated; and

b) a pharmaceutically acceptable carrier.

60. (New) The formulation of claim 59, wherein the carrier is a liposome.

61. (New) The formulation of claim 59, wherein said polypeptide exhibits a specific activity of at least about 2×10^5 relative turbidity reducing units per mg protein.

62. (New) The formulation of claim 59, wherein the human plasma hyaluronidase polypeptide is present at a concentration of about 1.5×10^5 turbidity reducing units per milliliter of formulation.

63. (New) The formulation of claim 59, wherein said glycosylated polypeptide is sensitive to N-glycosidase-F treatment.

64. (New) The formulation of claim 59, wherein said glycosylated polypeptide comprises a mannose residue.

65. (New) The formulation of claim 59, wherein said polypeptide further comprises a fatty acid modification.

66. (New) The formulation of claim 65, wherein said fatty acid modification is resistant to phospholipase-C, phospholipase-D, and N-glycosidase-F.

67. (New) The formulation of claim 59, wherein said polypeptide exhibits a specific activity of at least about 6×10^5 relative turbidity reducing units per mg protein.

68. (New) The formulation of claim 59, wherein said polypeptide has a relative molecular mass of about 57 kDa as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis.

69. (New) The formulation of claim 59, wherein the polypeptide is at least 60% pure.

70. (New) The formulation of claim 59, wherein the polypeptide is at least 75% pure.

71. (New) The formulation of claim 59, wherein the polypeptide is at least 90% pure.

72. (New) The formulation of claim 59, wherein the polypeptide is at least 99% pure.

73. (New) A formulation comprising

a) a therapeutically effective amount of a recombinant, substantially pure, enzymatically active human plasma hyaluronidase polypeptide, wherein said polypeptide is glycosylated; and

b) a pharmaceutically acceptable carrier.

74. (New) The formulation of claim 73, wherein the carrier is a liposome.

75. (New) The formulation of claim 73, wherein said polypeptide exhibits a specific activity of at least about 2×10^5 relative turbidity reducing units per mg protein.

76. (New) The formulation of claim 73, wherein the human plasma hyaluronidase polypeptide is present at a concentration of about 1.5×10^5 turbidity reducing units per milliliter of formulation.

77. (New) The formulation of claim 73, wherein said glycosylated polypeptide is sensitive to N-glycosidase-F treatment.

78. (New) The formulation of claim 73, wherein said glycosylated polypeptide comprises a mannose residue.

79. (New) The formulation of claim 73, wherein said polypeptide further comprises a fatty acid modification.

80. (New) The formulation of claim 79, wherein said fatty acid modification is resistant to phospholipase-C, phospholipase-D, and N-glycosidase-F.

81. (New) The formulation of claim 73, wherein said polypeptide exhibits a specific activity of at least about 6×10^5 relative turbidity reducing units per mg protein.

82. (New) The formulation of claim 73, wherein said polypeptide has a relative molecular mass of about 57 kDa as determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis.

83. (New) The formulation of claim 73, wherein the polypeptide is at least 60% pure.

84. (New) The formulation of claim 73, wherein the polypeptide is at least 75% pure.

85. (New) The formulation of claim 73, wherein the polypeptide is at least 90% pure.

86. (New) The formulation of claim 73, wherein the polypeptide is at least 99% pure.